It is pleasing to find that the treatment prescribed in the Old English medical treatises sometimes, at least, failed to hinder recovery and sometimes even gave relief. S c e a r p n u m o l occurs several times for efficacious,[153] and r e t a n is found for to relieve.[154] W i e r p e, improvement, is found in the medical literature for convalescence,[155] and e d w i e r p u n g[156] is found once with the same meaning. The verbs (g e) w i e r p a n, a w i e r p a n, mean to recover, a process which did actually take place. W e a r ð h i m ð a g e ð u h t s w i l c e h e o g e w u r p a n (v.r. a w y r p a n) m i h t e[157] ("It seemed to him then as though she might recover").

The references are the same as in Bosworth and Toller's *Anglo-Saxon Dictionary* and in Toller's *Supplement* to the Dictionary, published respectively 1882 and 1921, by the Oxford University Press. To them add PAYNE, *English Medicine in the Anglo-Saxon Times* by Joseph Frank Payne. Fitzpatrick Lectures, 1903, London; LEON, *Kleinere angelsachische Denkmäler* by G. Leonhardi, being Band VI of R. P. Wülker's *Bibliothek der angelsachsischen Prosa*, Hamburg, 1905.

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Philip Syng Physick. 1768-1837

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PHILIP SYNG PHYSICK was born in Philadelphia on July 7, 1768. His father, Edmund Physick, was Keeper of the Great Seal and Receiver-general of the Colony of Pennsylvania; after the Revolution he became agent for the Penn estate. Physick senior was anxious that his son should be a doctor, but the boy at first showed no particular inclination to this course. He graduated in the Faculty of Arts at the Pennsylvania University in 1785 at the age of 17. He also worked for some time with his maternal grandfather, Philip Syng, who was a silversmith of repute, and this early practical training is said to have borne fruit in Physick's later marked ability in the contrivance of instruments.

His father's desire that Physick should study medicine now prevailed and the young man attended the courses of instruction conducted by Adam Kuhn. Kuhn had been a pupil of Linnaeus, was Professor of Botany and Materia Medica in the University of Pennsylvania and was Physician to the Pennsylvania Hospital. It might have been expected that Physick would go on to medical qualification in Philadelphia, but in November 1788 he and his father sailed for England. In London they obtained an introduction to John Hunter who took the young man as a pupil. The story is frequently repeated that when the elder Physick inquired what books his son should read, Hunter led the way into the dissecting room, showed them the bodies and said, "These are the books your son will read under my direction: the others are fit for very little".

Physick's name appears on the students' roll at St. George's under the date May 11, 1789, and he is assigned as dresser to John Hunter for one year.

In December 1789, the weekly Board met and received young Mr. Physick on his appointment as House Surgeon for the coming year. The Board also received twenty-five pounds of Mr. Physick's money to pay for his board and lodging. It is generally stated and it seems most probable that Physick owed his appointment to Hunter's sponsorship. Randolph, Physick's son-in-law and biographer, says that no little ill-feeling was aroused among the unsuccessful applicants. Physick completed his year of office with confessed profit to himself and, if Randolph is to

[153] Lchdm. I. 134. [154] Leon. 108/6. [155] Ib. 15/24. [156] Hom. Th. II. 26/29. [157] Hom. Skt. I. 436/65.

be believed, to the expressed gratification of the hospital authorities. The only other direct reference to his work at St. George's is by Hunter in his *Treatise on the Blood, Inflammation, and Gun-shot Wounds* (Part I, Section vii), where we read: "Many of these experiments were repeated, by my desire, by Dr. Physick now of Philadelphia, when he acted as House Surgeon at St. George's Hospital, whose accuracy I could depend upon." At one time during this year Physick was seriously ill; the diagnosis is nowhere given, but his condition was so grave that Hunter recommended his immediate return to his home. This, however, did not prove to be necessary.

At the end of 1790 Physick is said to have received the Diploma of the Royal College of Surgeons. The College had not then been incorporated and Physick's name cannot be found in the roll of the Surgeons' Company. He spent a few more months with Hunter, but declined an offer to become the great surgeon's assistant. In May 1791 he departed for Edinburgh, then the spiritual home of the English-speaking medical world. Here, in 1792, he received his doctorate, presenting a thesis on *Apoplexy* in Latin and dedicated to Hunter. Returning to Philadelphia in September 1792 he put up his plate there at the age of 24.

Accounts differ as to the rapidity with which his practice developed, but he himself complained in later years: "I walked the streets of Philadelphia after my return from Europe for nearly three years without making as much by my practice as would put soles on my shoes."

Nevertheless the famous yellow fever epidemic of 1793 seems to have brought Physick into contact with the great Benjamin Rush. This leader of the medical profession was also a politician of renown and had been one of the signatories of the Declaration of Independence. Incidentally, he used on that occasion an inkstand made by Physick's grandfather Syng. Rush's doctrine of "disorders of nerve force", derived from Cullen of Edinburgh, was the most bruited idea of the time; but all his theory failed before the ravages of the yellow fever. Suddenly he became convinced that purgation and bleeding were the essential treatment for this fever: in fact, it was the treatment for all fevers, and indeed, for all morbid conditions. Physick put forward the view to which Rush assented much later that yellow fever was not contagious and he came to Rush's support in the inevitable argument as to the value of bleeding with a public announcement in the *Gazette* of the United States of November 14, 1797: "With a view to inspiring confidence in blood-letting in cases of yellow fever, I take this method of informing my fellow citizens that I lost during my last attack of that fever 176 ounces of blood by 22 bleedings in ten days. The efficiency of this valuable remedy was aided by frequent copious evacuations from my bowel and a moderate salivation." This seems to be a remarkable contribution to a public journal and the more so in that Physick was strenuously opposed to public expression of his views. It is recorded too that in his declining years Physick expressed regret not that he had bled his patients so much but that he had not used venesection more freely.

In 1794 Physick was elected to the staff of the Pennsylvania Hospital and to that of the Philadelphia Dispensary. His life began to be full and we must examine its various aspects separately. First we may take his qualities as a surgeon; they seem to have been excellent. He is said to have operated with firmness and precision and with reason. His private practice became extensive largely because of his success in operating for two somewhat different diseases. He was extremely successful in enucleating the lens from the eye and in removing stones from the bladder. The first recorded operation in his private notebook is one of lens enucleation and so was his last performed on August 13, 1837, the day on which he suffered the first attack of his final illness. The most notable of his bladder operations was on Chief Justice Marshall, from whom he removed over one thousand stones. The patient was of advanced age and great renown; the mere suggestion of the operation had caused

some discussion; but in spite of this untoward circumstance, both surgeon and patient played their parts in an exemplary fashion and the Chief Justice lived some further years freed from the agonizing pain of his multitudinous calculi.

When we turn to the various new surgical methods, new instruments and new lines of treatment which Physick improvised, invented or instituted we shall see how well deserved was his fame. Immediately on his appointment to the Pennsylvania Hospital he tackled the problem of chronic ulcers, and by instituting a régime of rest for the affected limbs, he rapidly reduced the numbers of bed-cases which were proving a heavy burden on the hospital's resources. He made many improvements in the treatment of fractures: particularly he lengthened Desault's splint for fractures of the thigh. For intractable dislocations, he conceived the idea of copious bleeding even *ad deliquum animi*; this so reduced the resistance that reposition was possible. He contrived a stomach pump on being called to treat two small boys who had drunk laudanum. Monro II of Edinburgh had done this some years before, but Physick's invention was an independent one. He invented a special forceps and needle for controlling hæmorrhage by under-running the vessels. He designed various modifications of catheters, particularly the bougie-headed catheter. He constructed improved types of gorget for his lithotomy operations. He devised a double cannula with a wire loop for snaring tonsils and hæmorrhoids. He devised the tonsillotome.

He first achieved a successful operation " for the cure of artificial anus "—by this, I take it that he succeeded in closing a fæcal fistula. He experimented with absorbable animal ligatures; successfully treated a non-united fracture of the humerus by a seton; put into operation the idea of immobilizing the joint in cases of hip disease—a line of treatment extended to other joints; gave his name to a special pair of dental forceps and introduced into America the Wenzel operation of lens enucleation.

All these activities deserve our respect but hardly justify his title as " Father of American Surgery ", nor can his published writings earn him that distinction. He was extremely averse from putting his ideas into print and it is said that he even endeavoured to prohibit the posthumous publication of his notes. All that can be collected of his published works is a series of technical descriptions of new instruments and new methods.

It was in his ability as a teacher of surgery that Physick was most outstanding. In his earlier years in Philadelphia the Professorship of Surgery was combined with that of Anatomy and the surgical teaching was then much circumscribed. In 1800, Physick was approached privately by a number of students to lecture at the Pennsylvania Hospital. This he did, approaching the first lecture with natural diffidence and learning his discourse by heart. The lecture was welcomed and Physick continued his course, repeating it until in 1806 he was invited to a new separate Chair of Surgery. He took his lecturing with extreme seriousness; it was his practice to rise at 4 a.m., make his own fire and prepare his lecture notes before starting on the day's round. He had a complete mastery of his subject, but never went beyond the bounds of observable fact and of his own experience. The University of Pennsylvania owns several copies of notes made during his lectures. The actual discourses may have owed much to Physick's own style of delivery and this perhaps was his reason for refusing to publish them.

In 1819 he was transferred from the Chair of Surgery to the Chair of Anatomy, in which he succeeded his own nephew, John Syng Dorsey. This young man had early been apprenticed to his uncle, had qualified in Philadelphia and had, like his uncle, been a pupil at St. George's Hospital, but not until 1803, ten years after Hunter's death. Dorsey had practised in Philadelphia largely as Physick's junior and had in 1816 been appointed Professor of Materia Medica. In 1818 he was elected Professor of Anatomy and on November 2 he gave his inaugural lecture.

That same night he was attacked by typhus and died in less than a fortnight. For some reason of internal politics it was suggested that Physick should take over the Chair of Anatomy and relinquish that of Surgery. He went, in the words of one of his biographers, John Bell, " from the place where he was emphatically at home to one in which he was comparatively a stranger ". " The act ", says another, " was a descent from his high estate which dimmed and deadened his academic lustre."

The Chair of Surgery was filled by the appointment of the young William Gibson who, at 23, had been the first Professor of Surgery in the Maryland Medical School inaugurated in Baltimore in 1811. The two young men, Dorsey and Gibson, were the channels through which Physick's surgical teachings reached a wider world than that of his pupils and listeners. In 1813 Dorsey published *The Elements of Surgery* in two volumes. The book was well received in Edinburgh and was generally considered to represent Physick's teachings. A second edition appeared in Dorsey's lifetime and a third after his early death. Gibson published in 1824 *The Institutes and Practice of Surgery* and this, too, was said largely to derive from Physick's teaching.

In 1831, at the age of 63, Physick's failing health caused him to retire from active duties at the University. He was unanimously elected Emeritus Professor of Surgery and Anatomy " as a tribute to his merit in elevating the character of the school and in promoting the advance of medical science ".

Physick was ill in London in 1790. He had two attacks which were said to have been yellow fever—one in the epidemic of 1793 and another in 1797. In 1813 he had " typhus ". He had always suffered from catarrh and he was subject to repeated attacks of renal colic. His heart began to fail and in the summer of 1837 he developed hydrothorax. This caused such dyspnœa that for whole nights together he was unable to lie down. The enforced standing aggravated the increasing œdema of his legs till finally the overstretched skin broke down leaving gangrenous ulcers. He died on December 15, 1837.

Of Physick's personal characteristics we know little. Throughout the greater part of his life he is said to have lived lonely and alone. He used few words and he was impatient of verbosity in others. According to Randolph his colleagues and pupils admired him and his family were fond of him. For the most part we are left to assume that Physick could not suffer fools gladly, and that his bodily discomforts shortened his temper.

There is an unfortunate example of Physick's " common sense " in the story of McDowell's first paper on *Ovariotomy*. One of the first copies of this paper, which was written in 1817, was sent to Physick as the leading surgeon of the time. Physick dismissed with contempt the startling information contained in the crudely written and incomplete description. " The Father of American Surgery ", says Flexner, " was too knowing to be taken in by a nonentity's crude description of the impossible ". All that can be said in mitigation of this lamentable lack of imagination is that Physick did stop at condemnation. Many later surgeons were not only guilty of denying the value of McDowell's work in operating on ovarian tumours but they seem to have tried later to arrogate his glory to themselves.

Physick's appointments and honours were many. He was not only Physician to the Pennsylvania Hospital, but to the Philadelphia Dispensary. He seems to have been particularly pleased when the Pennsylvania Almshouses appointed him as " Surgeon Extraordinary ". From 1824 to his death he was President of the Philadelphia Medical Society. In 1825 he had the distinction of being the first American to be appointed a member of the Royal Academy of Medicine of France. In 1836, the year before his death, he was accorded the honour which is said to have pleased him most—he was elected an honorary member of the Royal Medical and Chirurgical Society of London, the predecessor of the Royal Society of Medicine.